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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/775,025	02/01/2001	Bruce I. Rosen	38,097	8274

4249 7590 03/26/2003

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EXAMINER

OH, TAYLOR V

ART UNIT	PAPER NUMBER
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1625

DATE MAILED: 03/26/2003

8

Please find below and/or attached an Office communication concerning this application or proceeding.

**Advisory Action**

Application No.

09/775,025

Applicant(s)

ROSEN, BRUCE I.

Examiner

Taylor Victor Oh

Art Unit

1625

--The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

THE REPLY FILED 11 March 2003 FAILS TO PLACE THIS APPLICATION IN CONDITION FOR ALLOWANCE. Therefore, further action by the applicant is required to avoid abandonment of this application. A proper reply to a final rejection under 37 CFR 1.113 may only be either: (1) a timely filed amendment which places the application in condition for allowance; (2) a timely filed Notice of Appeal (with appeal fee); or (3) a timely filed Request for Continued Examination (RCE) in compliance with 37 CFR 1.114.

**PERIOD FOR REPLY** [check either a) or b)]

- a) ☒ The period for reply expires 3 months from the mailing date of the final rejection.
- b) ☐ The period for reply expires on: (1) the mailing date of this Advisory Action, or (2) the date set forth in the final rejection, whichever is later. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of the final rejection. ONLY CHECK THIS BOX WHEN THE FIRST REPLY WAS FILED WITHIN TWO MONTHS OF THE FINAL REJECTION. See MPEP 706.07(f).

Extensions of time may be obtained under 37 CFR 1.136(a). The date on which the petition under 37 CFR 1.136(a) and the appropriate extension fee have been filed is the date for purposes of determining the period of extension and the corresponding amount of the fee. The appropriate extension fee under 37 CFR 1.17(a) is calculated from: (1) the expiration date of the shortened statutory period for reply originally set in the final Office action; or (2) as set forth in (b) above, if checked. Any reply received by the Office later than three months after the mailing date of the final rejection, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

1. ☐ A Notice of Appeal was filed on \_\_\_\_\_. Appellant's Brief must be filed within the period set forth in 37 CFR 1.192(a), or any extension thereof (37 CFR 1.191(d)), to avoid dismissal of the appeal.
2. ☐ The proposed amendment(s) will not be entered because:
- (a) ☐ they raise new issues that would require further consideration and/or search (see NOTE below);
  - (b) ☐ they raise the issue of new matter (see Note below);
  - (c) ☐ they are not deemed to place the application in better form for appeal by materially reducing or simplifying the issues for appeal; and/or
  - (d) ☐ they present additional claims without canceling a corresponding number of finally rejected claims.

NOTE: \_\_\_\_\_

3. ☐ Applicant's reply has overcome the following rejection(s): \_\_\_\_\_.
4. ☐ Newly proposed or amended claim(s) \_\_\_\_\_ would be allowable if submitted in a separate, timely filed amendment canceling the non-allowable claim(s).
5. ☒ The a) ☐ affidavit, b) ☐ exhibit, or c) ☒ request for reconsideration has been considered but does NOT place the application in condition for allowance because: see pages 2-5.
6. ☐ The affidavit or exhibit will NOT be considered because it is not directed SOLELY to issues which were newly raised by the Examiner in the final rejection.
7. ☐ For purposes of Appeal, the proposed amendment(s) a) ☐ will not be entered or b) ☐ will be entered and an explanation of how the new or amended claims would be rejected is provided below or appended.

The status of the claim(s) is (or will be) as follows:

Claim(s) allowed: \_\_\_\_\_.

Claim(s) objected to: \_\_\_\_\_.

Claim(s) rejected: \_\_\_\_\_.

Claim(s) withdrawn from consideration: \_\_\_\_\_.

8. ☐ The proposed drawing correction filed on \_\_\_\_\_ is a) ☐ approved or b) ☐ disapproved by the Examiner.
9. ☐ Note the attached Information Disclosure Statement(s) (PTO-1449) Paper No(s). \_\_\_\_\_.
10. ☐ Other: \_\_\_\_\_

The remarks have been considered, but have not been persuasive.

The rejection of Claims 1-20 under 35 U.S.C. 103(a) as being unpatentable over Sikkenga et al (U.S. 5,256,817) in view of Partenheimer et al (U.S. 5,081,290) is maintained as they were applied in the final rejection mailed 12-4-2002.

With respect to the lack of a motivation, reasonable expectation of success, and the suggestion of all the claim limitations, the Examiner has noted applicants' arguments. However, on the contrary to the applicants' assertion, there are the motivation, the reasonable expectation of success, and the suggestion of all the claim limitations. Sikkenga et al does indicate that the amount of the catalyst may be from 0.1 wt % to 5.0 wt. %, which corresponds to the claimed range, whereas Partenheimer et al does describe the process of producing an aromatic dicarboxylic acid by the oxidation of 2,6-naphthalenedicarboxylic acid obtained from the oxidation of 2,6-dimethylnaphthalene in the presence of a catalyst system containing tin (see col. 3, line 9) belonged to the Group IVB metals. Furthermore, there is an equivalent teaching between both references; Sikkenga et al expressly describes the employment of the oxidation catalysts in the process, such as cobalt, manganese, bromine-containing components (see col. 5, lines 9-14), just as Partenheimer et al has pointed out the use of the catalyst comprising soluble forms of cobalt, manganese, bromine (see col. 3, lines 31-33) during the process. In addition, the Partenheimer et al does emphasize that the catalyst containing a heavy metal compound, such as tin can be employed to control the rate of oxidation and selectivity of oxidation (see col. 6, lines 48-53). Therefore, it would have been obvious to the skillful artisan in the art to have incorporated Partenheimer et al's tin catalyst into Sikkenga et al's catalyst for the process

Art Unit: 1625

in order to control the rate of oxidation and the selectivity of oxidation. Also, the skilled in the art would expect the combined processes to have a reasonable success shown in the Partenheimer's et al process as well as to enhance the purification of 2,6-naphthalenedicarboxylic acid.

Concerning the failure of Sikkenga et al to teach the experimental runs at temperatures between 520 and 575F, regardless of the experimental runs, Sikkenga et al does teach the temperature of at least 500<sup>0</sup> F. (see col. 3, lines 5-10) at which the method of purifying the naphthalenedicarboxylic acid is obtained from the oxidation of 2,6-dimethylnaphthalene by treating the impure naphthalenedicarboxylic acid with hydrogen in the presence of a Group VIII noble metals supported on carbon. Therefore, the reference is relevant to the claimed invention.

Regarding lowering the purification temperature led to the reduction of the amounts of undesirable impurities, Sikkenga et al does teach the temperature of at least 500<sup>0</sup> F. (see col. 3, lines 5-10) at which the method of purifying the naphthalenedicarboxylic acid is obtained from the oxidation of 2,6-dimethylnaphthalene by treating the impure naphthalenedicarboxylic acid with hydrogen in the presence of a Group VIII noble metals supported on carbon. Furthermore, the limitation of a process with respect to ranges of pH, time and temperature does not impart patentability to a process when such values are those which would be determined by one of ordinary skill in the art in achieving optimum operation of the process. Temperature is well understood by those of ordinary skill in the art to be a result-effective variable, especially when attempting to control selectivity of a chemical process. Therefore, it would have been obvious to the skilled artisan in the art to have motivated to optimize the reaction parameter such as

Art Unit: 1625

temperature by routine experimentations in order to improve the purity and yield of the desired product.

With respect to numerous advantages at lower temperatures for purifying the naphthalenic acid, the Examiner has noted applicants' argument. However, they are obtained as a result of optimization process. Therefore, they do not have any patentable weight over the prior art reference.

Concerning the use of the tin catalyst in the Partenheimer's et al is directed to the oxidation process, the Examiner has noted applicants' argument. However, Sikkenga et al does teach that any known method for preparing the naphthalenedicarboxylic acids can be used for the purification including a method of using the heavy metal catalyzed oxidation (see col. 3 ,lines 55-66). Therefore, the oxidation process takes place in both processes by way of getting to the purification process. In conclusion, the teachings of Sikkenga et al combined with Partenheimer et al can be result in the purification .

The arguments after final rejection have been fully treated, but will not overcome the rejection as stated above.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to T. Victor Oh whose telephone number is (703) 305-0809. The examiner can normally be reached on Monday through Friday from 8:30 to 5:00.

Application/Control Number: 09/775,025

Page 5

Art Unit: 1625

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Alan Rotman can be reached on (703) 308-4698. The fax phone number for the organization where this application or proceeding is assigned is (703) 308-4556.

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*3/25/03*

*Alan L. Rotman*  
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